

EXHIBIT 5.4

Variable	Coefficient	T-Statistic
Log Real Price	-0.1314	-1.81
Log Real Income	0.3997	1.24
Log of Real Price of Cellular Services	0.7264	4.27
Log of Employment	4.0038	7.60
Nationwide Calling Plan Variable	-0.0170	-1.27
Constant	-29.1350	-4.66
February	-0.0165	-1.60
March	-0.0329	-3.22
April	-0.0147	-1.43
May	-0.0400	-3.89
June	-0.0401	-3.89
July	-0.0276	-2.82
August	-0.0004	-0.04
September	-0.0079	-0.75
October	-0.0261	-2.47
November	-0.0338	-3.32
December	-0.0387	-3.76

2. Access Minute Growth Ratios

An access minute growth ratio was used to project demand to the test period. Because average schedule sample study area demand data were collected for the base period (July

2001 through June 2002), an access minute growth ratio was developed to project access minutes data from the average month of the base period to the average month of the test period. The calculation of the access minutes growth ratio is described below.

The econometric model was used to estimate total population access minutes values for each month of the base period and each month of the test period. NECA calculated the model annual total access minutes for the base period and the model total for the test period.

The Access Minute Growth Ratio was calculated by dividing the test period value by the base period value, as follows:

$$\begin{aligned}\text{Access Minute Growth Ratio} &= \frac{\text{Annual Modeled Access Minutes 7/03 - 6/04}}{\text{Annual Modeled Access Minutes 7/01 - 6/02}} \\ &= \frac{4,755,144,942}{4,873,869,779} \\ &= 0.9756\end{aligned}$$

NECA used the Access Minute Growth Ratio to project access minutes data of sample companies. Using settlement data for each sample study area, NECA calculated the monthly average access minutes for the base period.¹⁰ The base period monthly average access minutes value of each study area was multiplied by the Access Minute Growth Ratio to determine its test period monthly average access minutes. NECA used test period access minutes of each average schedule sample study area to evaluate allocation models, as described in Section VI, and to derive several Traffic Sensitive settlement formulas as

¹⁰ These data are displayed in Appendix D1

described in Section VII

D. Stratified Access Line Forecasting

NECA forecasted access lines of sample study areas using Stratified Access Line Growth Ratios, which measure the relative growth of access lines from the average month of the base period to the average month of the test period within each stratum of average schedule companies. The use of a stratified approach was introduced in the 2000 Study in order to improve the accuracy of access line forecasts, after differences with respect to access line growth were observed among large and small study areas.¹¹

In the 2000 Study, NECA tested several stratification models containing various breakpoints and found that the most statistically significant differences in access line growth rates occurred when 1,000 and 7,500 access lines were used to group sample study areas. These tests were repeated during this study. Because these tests did not reveal any improvements to the accuracy of the growth ratio estimates, NECA continues to use these two breakpoints in this study.

Stratified growth models were developed by fitting a regression model to historical monthly access line values of the average schedule study areas in each stratum. The three year historical time period from July 1999 through June 2002, including all adjustments made through June 2002, was selected because NECA found that access line growth prior to July 1999 was not representative of growth during the remainder of the trend. NECA also found that the rate of growth in access lines reported for settlements each month by large companies (average schedule companies with more than 7,500 access lines) decreased significantly starting in January 2001. Medium and small average schedule

¹¹ See National Exchange Carrier Association, Inc., 2001 Modification of Average Schedules, December 28, 2000, Sec. V.D at p 18.

companies started reporting significant decreases in June 2001. As a result, NECA added trend change indicators to the access line model structures to capture the impact of the reported decreases on the overall strata growth ratios. Then NECA derived the following models and access line growth rates, using the regression data displayed in Exhibit 5.5A, to estimate base period to test period growth for the average schedule population:

If Access Lines are less than or equal to 1,000

$$\text{Monthly Access Lines} = 85,754 + (186.36 * \text{Month Sequence}) \\ + (-260.73 * \text{Trend Change Indicator})$$

Where Trend Change Indicator = 0, from July 1999 to May 2001
Trend Change Indicator = 1 for June 2001; 2 for July 2001, etc

$$R^2 = 0.9577 \quad t\text{-statistic for Intercept} = 760.64 \quad F\text{-statistic} = 373.68 \\ t\text{-statistic for Slope} = 24.85 \\ t\text{-statistic for Indicator} = -13.54$$

If Access Lines are between 1,000 and 7,500

$$\text{Monthly Access Lines} = 792,173 + (2,216.41 * \text{Month Sequence}) \\ + (-2,287.34 * \text{Trend Change Indicator})$$

Where Trend Change Indicator = 0, from July 1999 to May 2001
Trend Change Indicator = 1 for June 2001; 2 for July 2001, etc.

$$R^2 = 0.9835 \quad t\text{-statistic for Intercept} = 862.93 \quad F\text{-statistic} = 984.70 \\ t\text{-statistic for Slope} = \mathbf{36.30} \\ t\text{-statistic for Indicator} = -14.59$$

If Access Lines are greater than 7,500

$$\text{Monthly Access Lines} = 1,489,501 + (6,784.10 * \text{Month Sequence}) \\ + (-5,072.87 * \text{Trend Change Indicator})$$

Where Trend Change Indicator = 0, from July 1999 to December 2001
Trend Change Indicator = 1 for January 2002; 2 for February 2002; etc.

$$R^2 = 0.9961 \quad t\text{-statistic for Intercept} = 1,100.39 \quad F\text{-statistic} = 4,260.58 \\ t\text{-statistic for Slope} = 62.56 \\ t\text{-statistic for Indicator} = -27.03$$

EXHIBIT 5.5A

DEMAND DATA USED IN TIME SERIES MODES - COMMON LINE

DATE	Common Line Month Sequence	Access Lines By Line Size Group		
		Small	Medium	Large
199907	1	86,181	792,750	1,490,767
199908	2	86,129	795,135	1,501,186
199909	3	86,397	798,734	1,508,991
199910	4	86,274	800,795	1,517,974
199911	5	86,480	801,210	1,522,806
199912	6	86,497	802,954	1,528,227
200001	7	86,635	804,853	1,538,682
200002	8	86,810	809,018	1,546,708
200003	9	87,197	812,737	1,555,891
200004	10	87,758	816,917	1,562,293
200005	11	88,113	820,869	1,566,791
200006	12	88,601	823,653	1,572,202
200007	13	88,672	825,179	1,575,797
200008	14	88,788	826,262	1,585,508
200009	15	88,968	828,620	1,590,056
200010	16	89,004	829,537	1,597,405
200011	17	88,889	829,518	1,603,029
200012	18	88,903	829,893	1,605,058
200101	19	89,249	830,876	1,608,643
200102	20	89,373	832,674	1,614,892
200103	21	89,512	835,830	1,618,457
200104	22	89,601	840,376	1,622,085
200105	23	89,842	842,585	1,620,807
200106	24	89,862	843,139	1,620,379
200107	25	89,984	843,678	1,620,134
200108	26	89,889	843,346	1,625,316
200109	27	89,907	843,752	1,629,487
200110	28	89,744	843,687	1,632,278
200111	29	89,529	842,426	1,632,321
200112	30	89,355	841,769	1,633,538
200201	31	89,239	841,331	1,635,576
200202	32	89,106	841,401	1,635,680
200203	33	89,182	841,836	1,638,762
200204	34	89,102	842,945	1,639,683
200205	35	89,489	843,506	1,638,070
200206	36	89,275	842,434	1,637,305

EXHIBIT 5.5B

DEMAND DATA USED IN TIME SERIES MODELS - TRAFFIC SENSITIVE

DATE	Traffic Sensitive Month Sequence	Normal Route Circuit Miles	Long Route Circuit Miles	Switched Circuit Terminations	Intertoll Dial Circuits
199907	1	3,069,590	429,321	107,896	18,121
199908	2	3,148,908	436,729	110,707	17,944
199909	3	3,190,486	484,256	109,627	17,631
199910	4	3,198,640	497,389	108,550	17,625
199911	5	3,245,808	540,846	108,294	17,503
199912	6	3,293,998	543,463	110,005	17,574
200001	7	3,372,896	560,381	113,613	17,167
200002	8	3,445,505	574,714	116,161	17,182
200003	9	3,444,844	582,694	114,677	17,355
200004	10	3,502,029	613,106	117,327	17,494
200005	11	3,511,905	613,246	116,463	17,678
200006	12	3,534,833	614,043	116,102	17,906
200007	13	3,601,521	606,553	119,621	17,411
200008	14	3,615,511	606,649	119,833	17,454
200009	15	3,612,706	605,708	118,637	17,536
200010	16	3,622,512	570,999	119,469	17,573
200011	17	3,616,246	569,865	118,378	17,512
200012	18	3,630,814	579,089	118,731	17,981
200101	19	3,613,196	575,593	117,585	17,918
200102	20	3,639,851	585,876	117,496	18,114
200103	21	3,647,600	588,209	116,707	18,626
200104	22	3,701,426	666,909	118,460	18,665
200105	23	3,703,768	673,327	118,105	18,670
200106	24	3,723,486	681,112	117,881	18,696
200107	25	3,726,506	688,911	117,784	18,679
200108	26	3,775,997	695,124	118,758	18,501
200109	27	3,791,201	692,559	119,034	18,559
200110	28	3,806,751	729,340	119,029	18,537
200111	29	3,814,119	744,348	119,433	18,332
200112	30	3,848,572	743,542	119,336	18,186
200201	31	3,923,778	743,699	119,799	17,180
200202	32	4,002,185	743,689	120,845	17,622
200203	33	4,098,150	743,724	121,496	18,052
200204	34	4,140,069	766,865	122,617	18,729
200205	35	4,134,107	767,112	122,457	18,923
200206	36	4,080,961	766,719	121,695	18,723

Using **these** access line regression models, the Stratified Access Line Growth Ratios were computed as follows:

Average of Month Sequence Numbers in Test Period (July 2003 to June 2004) = 54.5

Average of Month Sequence Numbers in Base Period (July 2001 to June 2002) = 30.5

2 Year Access Line Growth Ratio For Study Areas With Less Than 1,000 Access Lines

$$\begin{aligned} &= \frac{\text{Access Line Modeled Avg. Month of 7/03 - 6/04}}{\text{Access Line Modeled Avg. Month of 7/01 - 6/02}} \\ &= \frac{90,376.90 \text{ Access Lines}}{92,221.78 \text{ Access Lines}} \\ &= 0.9800 \end{aligned}$$

2 Year Access Line Growth Ratio For Study Areas With 1,000 to 7,500 Access Lines

$$\begin{aligned} &= \frac{\text{Access Line Modeled Avg. Month of 7/03 - 6/04}}{\text{Access Line Modeled Avg. Month of 7/01 - 6/02}} \\ &= \frac{838,628.80 \text{ Access Lines}}{840,331.12 \text{ Access Lines}} \\ &= 0.9980 \end{aligned}$$

2 Year Access Line Growth Ratio For Companies With More Than 7,500 Access Lines

$$\begin{aligned} &= \frac{\text{Access Line Modeled Avg. Month of 7/03 - 6/04}}{\text{Access Line Modeled Avg. Month of 7/01 - 6/02}} \\ &= \frac{1,731,077.27 \text{ Access Lines}}{1,688,806.75 \text{ Access Lines}} \\ &= 1.0250 \end{aligned}$$

Next, base period average access lines were computed for each sample study area, using the August 2002 view of data reported to the NECA pool from July 2001 through June 2002.¹² The average number of monthly access lines over the base period was calculated for each sample study area. Each sample company was then assigned to a stratum, based on its access line size. Forecasted test period average access lines for each sample study area was computed by multiplying base period average access lines by the appropriate Stratified Access Line Growth Ratio.

E. Circuit Mile Forecasting

In the 2000 Study, NECA initiated a method of forecasting normal route and long route circuit miles separately, based on analysis which indicated that they have different growth trends. In this Study, NECA continues analyzing normal route and long route circuit mile growth independently. NECA uses a threshold of 100 average circuit miles per circuit to distinguish low cost routes **from** normal cost routes. NECA's analysis of networks of companies with normal and low cost routes showed that a threshold of 100 circuit miles per circuit correctly classified only companies with low cost in the long route group, while at lower threshold levels, some companies with normal costs are incorrectly classified as low cost companies. Therefore, NECA continues to use 100 as the long route threshold. The total number of monthly circuit miles reported for settlements were split into normal route and long route circuit miles as follows:

If Circuit Miles are less than or equal to (100 x Interstate Circuits),

Then Normal Route Circuit Miles = Circuit Miles

And Long Route Circuit Miles = 0

¹² These data are displayed in Appendix D1

If Circuit Miles are more than (100 x Interstate Circuits),

Then Normal Route Circuit Miles = 100 x Interstate Circuits

And Long Route Circuit Miles = Total Circuit Miles - Normal Route Circuit Miles

. 1. Normal Route Circuit Mile Forecasting

The following variables were used in normal route circuit mile regression modeling:

- Normal Route Circuit Mile counts - Monthly amounts were calculated from the settlement data submitted by average schedule companies from July 1999 through June 2002, including all adjustments ~~through~~ June 2002 (*See* Exhibit 5.5B).
- Month Sequence number - A sequentially assigned number, measuring a time trend. Month Sequence 1 corresponds to July 1999 and Month Sequence **36** corresponds to June 2002.
- Trend Change Indicator - NECA found that the rate of growth in normal route circuit miles reported for settlements each month changed significantly starting in July 2000. As a result, NECA added a trend change indicator to the model structure to capture the impact of the reported changes on the overall growth ratio.

The regression model for normal route circuit miles is as follows:

$$\text{Normal Route Circuit Miles} = 3,076,614 + (36,655 \times \text{Month Sequence}) + (-14,465 \times \text{Trend Change Indicator})$$

Where Trend Change Indicator = 0, from July 1999 to July 2000

Trend Change Indicator = 1 for August 2000; 2 for September 2000, etc.

$$R^2 = 0.9567 \quad \begin{array}{l} t\text{-statistic for Intercept} = 91.14 \\ t\text{-statistic for Slope} = 9.88 \\ t\text{-statistic for Indicator} = -3.07 \end{array} \quad F\text{-statistic} = 364.17$$

Month Sequence 1 = July 1999

The Normal Route Circuit Mile Growth Ratio was computed as follows:

Average of Month Sequence Numbers from July 2003 to June 2004 Test Period = 54.5

Average of Month Sequence Numbers from July 2001 to June 2002 Base Period = 30.5

Normal Route Circuit Mile Growth Ratio

$$\begin{array}{l} \sim \frac{\text{Normal Route Circuit Miles Modeled Avg. Month of 7/03 - 6/04}}{\text{Normal Route Circuit Miles Modeled Avg. Month of 7/01 - 6/02}} \\ - \frac{4,458,382.85 \text{ Normal Route Circuit Miles}}{3,941,454.01 \text{ Normal Route Circuit Miles}} \\ - 1.1312 \end{array}$$

2. Long Route Circuit Mile Forecasting

The growth in long route circuit miles was calculated based on historical trend data from July 1999 to June 2002. Analysis of the data from this period revealed that the growth in long route circuit miles changed significantly after March 2000. To account for this change,

NECA added a dummy variable to the long route circuit mile regression model to ensure that the magnitude change did not unduly influence test period growth estimates. The following variables were used in long route circuit mile regression modeling:

- Long Route Circuit Mile Counts - Monthly long route circuit miles were calculated from settlement data submitted by average schedule companies from July 1999 through June 2002, including all adjustments through June 2002. (*See Exhibit 5.5B*)
- Month Sequence number - A sequentially assigned number, measuring a time trend. Month Sequence 1 corresponds to July 1999 and Month Sequence 36 corresponds to June 2002.
- Trend Change Indicator - NECA found that the rate of growth in long route circuit miles reported for settlements each month changed significantly starting in March 2000. As a result, NECA added a trend change indicator to the model structure to capture the impact of the reported changes on the overall growth ratio.

The regression model for long route circuit miles is as follows:

$$\text{Long Route Circuit Miles} = 427,940 + (14,609 \times \text{Month Sequence}) - (6,951.86 \times \text{Trend Change Indicator})$$

where *Trend Change Indicator* = 0, from July 1999 to March 2000
Trend Change Indicator = 1 for April 2000; 2 for May 2000, etc.

$$R^2 = .9077 \quad \begin{array}{l} t\text{-statistic for Intercept} = 21.55 \\ t\text{-statistic for Month Sequence} = 5.31 \\ t\text{-statistic for Trend Change Indicator} = -2.21 \end{array} \quad F\text{-statistic} = 162.31$$

Month Sequence 1 = July 1999

The Long Route Circuit Mile Growth Ratio was computed as follows:

Average of Month Sequence Numbers from July 2003 to June 2004 Test Period = 54.5

Average of Month Sequence Numbers from July 2001 to June 2002 Base Period = 30.5

Long Route Circuit Mile Growth Ratio

$$\begin{aligned} &= \frac{\text{Long Route Circuit Miles Modeled Avg. Month of 7/03 - 6/04}}{\text{Long Route Circuit Miles Modeled Avg. Month of 7/01 - 6/02}} \\ &= \frac{907.820.87 \text{ Long Route Circuit Miles}}{732,882.54 \text{ Long Route Circuit Miles}} \\ &= 1.2387 \end{aligned}$$

Next, base period average normal and long route circuit miles were computed for each sample study area, using the August 2002 view of data reported to the NECA pool from July 2001 through June 2002.¹³ The average number of monthly normal and long route circuit miles over the base period was calculated for each sample study area. Forecasted test period average normal and long route circuit miles for each sample study area was computed by multiplying base period average number of normal and long route circuit miles by the appropriate Circuit Mile Growth Ratio.

F. Circuit Termination Model

NECA forecasted circuit terminations of sample average schedule study areas using a Circuit Termination Growth Ratio. The ratio was developed by fitting a regression model to historical

¹³ These data are displayed in Appendix D1

monthly circuit termination values of the average schedule population.

The following variables were used in circuit termination demand regression modeling.

- Circuit Termination counts - Monthly amounts reported for settlements by average schedule companies from July 1999 through June **2002**, including all adjustments through August **2002**. Exhibit 5.5B displays the circuit termination data.
- Month Sequence number - A sequentially assigned measure of a time trend. Month Sequence 1 corresponds to July 1999 and Month Sequence **36** corresponds to June **2002**.
- Trend Change Indicator - Analysis of the data from this period revealed that the growth in circuit terminations changed significantly after July **2000**. To account for this change, NECA added a dummy variable to the regression model to ensure that the trend change did not unduly influence test period growth estimates.

The regression model describing the historical growth trend of circuit terminations data of the average schedule population is as follows.

$$\text{Circuit Terminations} = 106,893 + (842.61 \times \text{Month Sequence}) - (712.70 \times \text{Trend Change Indicator})$$

where *Trend Change Indicator* = 0, from July 1999 to July 2000
Trend Change Indicator = 1 for August 2000; 2 for September 2000, etc.

$$\begin{array}{lll} R^2 = .8870 & t\text{-statistic for Intercept} = 140.33 & F\text{-statistic} = 129.46 \\ & t\text{-statistic for Month Sequence} = 10.73 & \\ & t\text{-statistic for Trend Change Indicator} = -6.84 & \end{array}$$

Month Sequence 1 = July 1999

A Circuit Termination Growth Ratio was computed as follows:

Average of Month Sequence Numbers from July 2003 to June 2004 Test Period = 54.5

Average of Month Sequence Numbers from July 2001 to June 2002 Base Period = 30.5

Circuit Termination Growth Ratio

$$\begin{aligned} & - \frac{\text{Circuit Terminations Modeled Avg. Month of 7/03 - 6/04}}{\text{Circuit Terminations Modeled Avg. Month of 7/01 - 6/02}} \\ & = \frac{123,218.20 \text{ Circuit Terminations}}{120,120.36 \text{ Circuit Terminations}} \\ & - 1.0258 \end{aligned}$$

Next, NECA calculated a monthly average base period circuit termination value for each sample average schedule study area, using data reported to the NECA pool for the period from July 2001 through June 2002, including all adjustments through August 2002. NECA forecasted circuit terminations to the test period by multiplying each sample study area's base period value by the Circuit Termination Growth Ratio.

G. Intertoll Dial Circuit Forecasting

NECA forecasted Intertoll dial circuits of sample average schedule study areas using an Intertoll Dial Circuit Growth Ratio. The ratio was developed by fitting a regression model to historical monthly Intertoll dial circuit values of the average schedule population.

The following variables were used in Intertoll dial circuit demand regression modeling.

- Intertoll Dial Circuit counts - Monthly amounts reported for settlements by average schedule companies from July 1999 through June 2002, including all adjustments through August 2002. Exhibit 5.5B displays the Intertoll dial circuit data.
- Month Sequence number - A sequentially assigned measure of a time trend. Month Sequence 1 corresponds to July 1999 and Month Sequence 36 corresponds to June 2002.

The regression model describing the historical growth trend of Intertoll dial circuit data of the average schedule population is as follows:

$$\text{Intertoll Dial Circuits} = 17,354 + (36.11 \times \text{Month Sequence})$$

$$R^2 = 0.5437 \quad t\text{-statistic for Intercept} = 144.17 \quad F\text{-statistic} = 40.51$$

$$t\text{-statistic for Month Sequence} = 6.36$$

$$\text{Month Sequence 1} = \text{July 1999}$$

A Intertoll Dial Circuit Growth Ratio was computed as follows:

$$\text{Average of Month Sequence Numbers from July 2003 to June 2004 Test Period} = 54.5$$

$$\text{Average of Month Sequence Numbers from July 2001 to June 2002 Base Period} = 30.5$$

*Intertoll Dial Circuit **Growth** Ratio*

$$\begin{aligned}
 & \rightarrow \frac{\text{Intertoll Dial Circuits Modeled Avg. Month of 7/03 - 6/04}}{\text{Intertoll Dial Circuits Modeled Avg. Month of 7/01 - 6/02}} \\
 & - \frac{19,322.00 \text{ Intertoll Dial Circuits}}{18,455.36 \text{ Intertoll Dial Circuits}} \\
 & = 1.0470
 \end{aligned}$$

Next, NECA calculated a monthly average base period Intertoll dial circuit value for each sample average schedule study area, using data reported to the NECA pool for the period from July 2001 through June 2002, including all adjustments through August 2002. NECA forecasted Intertoll dial circuits to the test period by multiplying each sample study area's base period value by the Intertoll Dial Circuit Growth Ratio.

H. Special Access Revenue Forecasting

NECA has data to support projection of average schedule company costs at the total account level, but not at the access category level. Total account growth ratios have been historically stable in the six percent to ten percent range. In contrast, demand for Special Access services, as measured by the revenues reported monthly to NECA for settlements, has grown at rates as high as thirty percent annually in recent years. Since the 2000 Study, the use of Special Access revenue data from more recent time periods (especially from calendar year 1999 and later) produced forecasts that are substantially incompatible with forecasts of cost data, which are based on the historical accounting data collected from sample study areas.

To avoid a misalignment of the cost and demand data, in the 2000 Study NECA started to produce a Special Access revenue forecast that was directly compatible with the cost forecast by: (1) using base period Special Access revenues from the same months as the accounting data; and (2) projecting revenue growth ~~in~~ parallel with cost ~~growth~~. This method is continued in this Study.

1. Special Access Revenue Data

In this study, NECA used Special Access revenue data reported to settlements from January

1999 to December 2000, as described in Section III.E, as the base period data. Average schedule study area settlements for special access service provisioning are calculated amounts derived from settlement formulas, that assume achievement of the authorized rate of return. The revenue levels reported for settlements, however, reflect the pool's achieved rate of return. NECA adjusted the revenues reported monthly for settlements to the rate of return authorized by the FCC during that time period using the following formula:

Rate of Return Adjustment Factor =

Special Access Revenue Requirement At Authorized Rate of Return
Special Access Revenues At Achieved Rate of Return

4

The Rate of Return Adjustment Factors calculated are shown in Exhibit 5.6.

2. Forecast of Special Access Revenues

To ensure consistency between the cost and demand data underlying the development of Special Access settlement formulas, NECA projected Special Access revenues to test period values using the same method used to project historical revenue requirements. The annual revenue requirement growth ratios by stratum (displayed on Exhibit 5.2) were converted into Multi-year Growth Ratios by Stratum by multiplying annual growth ratios by either three and one-half or four and one-half to capture the elapsed time between the 2000 and 1999 accounting periods and the test period, as described in Section V.B.8.

EXHIBIT 5.6

RATE OF RETURN ADJUSTMENT FACTOR DEVELOPMENT

Month	Special Access Revenues Requirement At Authorized Rate of Return	Special Access Revenues At Achieved Rate of Return	Rate of Return Adjustment Factor
199901	8,096,144	7,307,513	1.1079
199902	8,157,439	7,480,556	1.0905
199903	8,178,326	7,593,502	1.0770
199904	8,399,533	7,756,544	1.0829
199905	8,328,793	7,741,010	1.0759
199906	8,393,687	7,980,136	1.0518
199907	8,575,838	8,452,289	1.0146
199908	8,491,023	8,579,038	0.9897
199909	8,631,172	8,898,978	0.9699
199910	8,890,579	9,053,184	0.9820
199911	8,935,131	9,168,428	0.9746
199912	8,945,401	9,425,063	0.9491
200001	10,911,175	9,584,574	1.1384
200002	10,916,572	9,660,344	1.1300
200003	11,039,642	9,852,950	1.1204
200004	11,193,556	9,983,260	1.1212
200005	11,183,822	10,114,522	1.1057
200006	11,385,109	10,626,103	1.0714
200007	11,374,573	10,748,785	1.0582
200008	12,095,564	11,714,620	1.0325
200009	12,296,623	12,266,595	1.0024
200010	12,861,398	12,746,775	1.0090
200011	12,960,863	13,107,179	0.9888
200012	13,078,803	13,542,376	0.9658
200101	14,957,982	14,009,902	1.0677
200102	14,889,863	14,116,163	1.0548
200103	15,064,406	14,621,518	1.0303
200104	15,320,235	15,177,288	1.0094
200105	15,429,732	15,581,087	0.9903
200106	15,524,418	16,021,937	0.9689
200107	15,633,980	16,636,425	0.9397
200108	15,876,917	16,968,172	0.9357
200109	15,811,348	17,263,231	0.9159
200110	16,115,645	17,324,108	0.9302
200111	16,305,416	17,885,503	0.9117
200112	16,437,471	18,405,909	0.8931
200201	16,283,083	19,706,322	0.8263
200202	16,347,098	20,166,752	0.8106
200203	16,568,594	20,749,391	0.7985
200204	16,589,051	20,942,368	0.7921
200205	16,622,634	21,563,753	0.7709
200206	16,417,787	21,175,334	0.7753
200207	17,737,348	20,321,869	0.8728

The forecasted test period average Special Access revenues for each sample study area was computed as follows:

Sample Study Area Test Period Special Access Revenues

$$\begin{aligned} &= \text{Sample Study Area Base Period Special Access Revenues} \\ &\quad \times \text{Rate \& Return Adjustment Factor} \\ &\quad \times \text{Multi-year Stratum Revenue Requirement Growth Ratio} \end{aligned}$$

This method of forecasting Special Access revenues reduces the annual variation in estimated demand growth, while improving the accuracy of the Special Access settlement formula by assuring alignment of underlying cost and demand data.